

***What Is Claimed Is:***

1           1.       A test unit for an aircraft cabin telephony system, comprising:  
2           a pair of connectors for inserting the test unit in-line within the system;  
3           an AC voltage module operative to indicate the presence of an AC voltage  
4           when the test unit is connected to the Cabin Delivery System connector of the  
5           cabin telephony system;  
6           a signal module operative to detect the presence of data signals when the  
7           test unit is connected to the Cabin Delivery System connector;  
8           a DC power module operative to indicate the presence of DC voltage when  
9           the test unit is connected to a seat telephony box within the cabin telephony  
10          system; and  
11          an AC current module operative to detect an over-current condition when  
12          the test unit is connected to the Cabin Delivery System connector of the cabin  
13          telephony system.

1           2.       The test unit of claim 1, further comprising:  
2           a relay bank operative to selectively couple the AC voltage module, signal  
3           module, and DC power module to the pair of connectors as a function of the AC  
4           voltage present on the connectors.

1           3.       The test unit of claim 2, wherein the signal module comprises  
2           means for detecting the presence of E1 signals.

1           4.     The test unit of claim 3, wherein the AC voltage module  
2 comprises:  
3           an AC voltage detect unit having  
4           a window comparator, and  
5           a current source coupled to the comparator.

1           5.     The test unit of claim 4, wherein the signal module comprises:  
2           an inbound E1 signal module configured to detect the presence of inbound  
3 E1 signals; and  
4           an outbound E1 signal module configured to detect the presence of  
5 outbound E1 signals.

1           6.     The test unit of claim 5, wherein each of the E1 signal modules  
2 comprises:  
3           a monostable multivibrator configured to lengthen the duration of the  
4 pulses of the E1 signal.